

CEG 4110 – Homework 2: Design Patterns

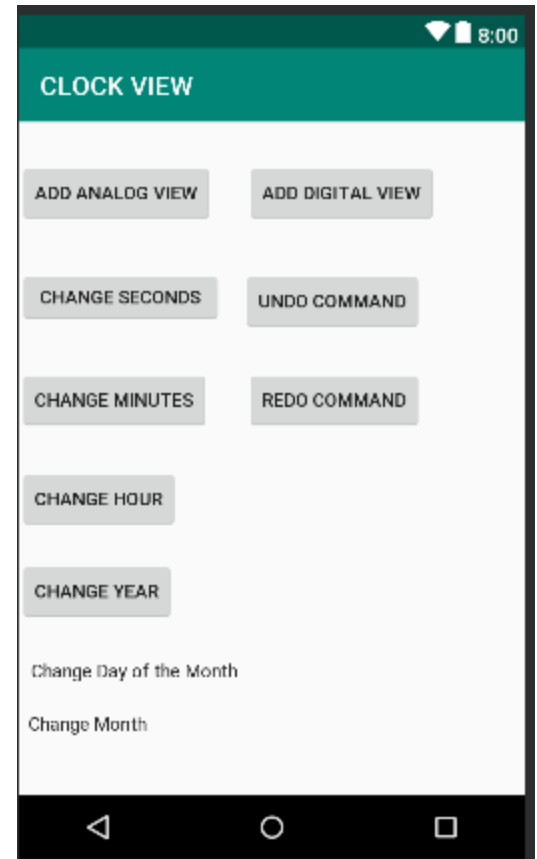
Michael Dang

Main features

For this assignment, the main approach was to implement the Command and MVC (Model View Controller) design patterns in our software. The Command design pattern was responsible for store lists of actions that will be later be called by using execute (). For this assignment, the actions were:

- Change Seconds
- Change Minutes
- Change Hour
- Change Year
- Change Month
- Change Day of Month
- Add Digital View
- Add Analog View

By using the Command design pattern, it allows the user to use a list of commands that can be executed multiple times. You can also use it to undo and redo commands that were previously called upon, (such if a user wants to 'undo' any time changes that were applied).



The MVC design pattern for this assignment was used to separate the data/calculations into a Model class and the interface into the View class, while the Controller class controls the interactions between the View and Model Class. Specifically, Clock view has the sole responsibility for printing the view (or multiple views) of the Clock every time the user selects to add a digital or analog view. The Clock Model is responsible for storing data (seconds, minutes, hour, etc.) and the method (setTime). Lastly, the Clock Controller is used to coordinate the Clock View and the Clock Model.